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(54) Title: SYSTEM, METHOD AND APPARATUS FOR MEASURING BLOOD FLOW AND BLOOD VOLUME

(57) Abstract: A system for measuring blood flow in an organ of a subject, particularly useful for non-invasive cardiac output monitoring (N.I.C.O.M.TM), the system comprises: a radiofrequency generator for generating output radiofrequency signals; a plurality of electrodes, designed to be connectable to the skin of the subject, the electrodes being for transmitting the output radiofrequency signals to the organ and for sensing input radiofrequency signals of the organ. The system further comprises a mixer, electrically communicating with the radiofrequency generator and at least a portion of the plurality of electrodes, for mixing the output radiofrequency signals and the input radiofrequency signals, so as to provide a mixed radiofrequency signal being indicative of the blood flow. The system further comprises electronic circuitry, constructed and designed to filter out a portion of the mixed radiofrequency signal so as to substantially increase a signal-to-noise ratio of a remaining portion of the mixed radiofrequency signal